

National Energy Technology Laboratory

O 440.1-4

DATE: 5/21/01

TITLE: NETL GENERAL WORKPLACE SAFETY PROGRAM

1. PURPOSE. This Operating Plan outlines the NETL roles, responsibilities, requirements, and processes for implementing the general workplace safety program at NETL. The Program includes, in part, workplace safety information for NETL employees and visitors who spend their time in NETL office-type environments.

The attachments to this Operating Plan specifically address some significant general safety issues, such as office ergonomics, housekeeping, lighting, means of egress and walkways, use of personal appliances, and smoking restrictions.

2. CANCELLATION.

- a. Morgantown Directives:

- (1) METC Procedure 3790.1-74A, Shop Safety, of 7/18/94.
- (2) METC Procedure 3790.1-109C, Workplace Safety, of 11/7/94.
- (3) METC Order 3792.2, Smoking on METC Property, of 4/30/93.

- b. Pittsburgh Directives:

- (1) PETC Document No. EH&S 2.1.2, Office Safety Plan, of 8/30/90.
- (2) PETC Document No. EH&S 3.1.3, Smoking Policy Plan, of 11/8/90.
- (3) PETC Document No. EH&S 3.4, Illumination Management Program, of 9/19/90.
- (4) PETC Document No. EH&S 3.4.1, Illumination Inspections Plan, of 2/28/91.
- (5) PETC Document No. EH&S 3.4.2, Illumination Improvement Plan, of 2/28/91.

3. REQUIREMENTS.

a. Points of contact.

- (1) This Operating Plan is largely a reference document for different aspects of general workplace safety, showing which regulations and requirements apply, and the points of contact for obtaining assistance. Questions may be directed to the following contacts, which are also located on the NETL ES&H/ISM Intranet page:
 - (a) General workplace safety issues -- the Designated ES&HD Representative.
 - (b) Information on existing or proposed exemptions to general safety requirements -- the NETL Safety and Health Officer or Designated ES&HD Representative.
 - (c) Issues regarding office chemical use and the associated Material Safety Data Sheets -- the Chemical Hygiene Officer (CHO).
 - (d) Safety and health-related questions and concerns regarding workplace layout (such as required number of exits, aisle width, blocked stairways, locations of laboratory hoods, and gas cylinders) -- the ES&H Division Director or the Life Safety Code Program Manager.

b. Ergonomics Program. NETL shall maintain and implement an Ergonomics Program that identifies and controls ergonomic hazards in accordance with the requirements outlined in Attachment A to this Operating Plan. The Program shall focus on minimizing employee exposure to ergonomic hazards that lead to musculoskeletal disorders (MSD).

c. Housekeeping.

- (1) Attachment B to this Operating Plan, Housekeeping, requires maintenance of a clean and orderly workplace to minimize slipping, tripping, electrical, and fire hazards.
- (2) The document requires that aisles, passageways, and exits be unobstructed to allow for normal passage as well as emergency egress.

- (3) Attachment B shall be used in conjunction with Attachment D, Means of Egress and Walkways.

d. Lighting Program.

- (1) Attachment C to this Operating Plan, Lighting Program, addresses requirements to assure that area, emergency, and exit lighting in work areas complies with applicable Federal, state, and local regulations and ordinances.
- (2) Attachment C describes the basic elements for performing illumination inspections and implementing illumination improvements.

e. Egress and walkways.

- (1) Attachment D, Means of Egress and Walkways, describes the requirements for aisle clearance and emergency exit requirements.
- (2) Attachment D requires that the means of egress shall not be locked, blocked, or otherwise treated so as to hamper the free, unobstructed egress from the work area.
- (3) Attachment D also requires that fire suppression systems, fire extinguishers, emergency showers, emergency eyewashes, and other emergency equipment shall not be blocked.

f. Personal appliances.

- (1) Attachment E to this Operating Plan addresses requirements for personally owned appliances brought to work by NETL employees.
- (2) Personal appliances include clocks, radios, coffee makers, cup warmers, etc.
- (3) Personal appliances shall be in good working condition and shall carry a nationally recognized testing laboratory approval.

g. Smoking in the workplace. Attachment F to this Operating Plan describes NETL smoking policies. It requires the designation and posting of smoking and non-smoking areas

and requires compliance by all NETL employees, subcontractors, and visitors.

- h. Referenced codes, regulations, and standards (listed under Section 5. References) are incorporated as requirements under this Operating Plan, even though these may not be mentioned specifically or in detail in this Operating Plan and its attachments.

4. DEFINITIONS.

- a. CFR -- Code of Federal Regulations.
- b. ES&HD -- Environment, Safety, and Health Division.
- c. Means of Egress -- A continuous and unobstructed way of exit travel from any point in a building or structure to a public way. It includes intervening spaces, such as courtyards, rooms, passageways, aisles, corridors, ramps, stairs, doorways, etc.
- d. Workplace Environment -- Office, shop, grounds, and laboratory areas where NETL employees and visitors are likely to encounter the types of hazards covered by this Operating Plan and its attachments.

5. REFERENCES.

- a. NETL Operating Plan 440.1-2, NETL Chemical Hygiene Program, of 3/7/01.
- b. NETL Operating Plan 440.1-5, NETL Fire Protection Plan, current version.
- c. NETL Procedure 420.2, Life Safety Design Criteria, of 2/20/98.
- d. NETL Procedure 440.1-2, NETL Chemical Inventory and SARA Title III Reporting, of 12/7/00.
- e. NETL Procedure 440.1-14, NETL Workplace Monitoring, current version.
- f. NETL Procedure 440.1-24, NETL Electrical Safety, current version.

g. Statutory ES&H Standards:

- (1) 29 CFR 1910, Subparts D, E, and Z.
- (2) 29 CFR 1926, Subpart C (as applicable).
- (3) 29 CFR 1910.22, General Requirements (Walking and Working Surfaces).
- (4) 29 CFR 1910.36, General Requirements for Means of Egress.
- (5) 29 CFR 1910.37, Means of Egress, General.
- (6) 29 CFR 1910.38, Employee Emergency Plans and Fire Prevention Plans.
- (7) 29 CFR 1910.1200, Hazard Communication Standard.
- (8) 29 CFR 1926.25, Housekeeping.
- (9) 29 CFR 1926.26, Illumination.
- (10) 29 CFR 1910.95, Occupational Noise Exposure.

h. Reference ES&H Standards:

- (1) ANSI Z358.1-1990, Standard for Emergency Eyewash and Shower Equipment, current edition.
- (2) NFPA 70, National Electrical Code (NEC), current edition.
- (3) NFPA 101, Life Safety Code Handbook, current edition.
- (4) ANSI Standard A11.1, Practice for Industrial Lighting, current edition.
- (5) ANSI Standard RP7, Practice for Industrial Lighting, current standard.

i. References:

- (1) Encyclopedia of Occupational Health and Safety, Vol. II, pp. 978-979.

6. QUALITY CONTROL.

- a. This Operating Plan and its attachments shall be reviewed at least annually and updated as required by the designated ES&HD Program Manager. Updating shall be in accordance with NETL Procedure 450.4-1, NETL ES&H Standards Identification and Maintenance Process.
- b. ES&H Representatives, in conjunction with the Life Safety Code Program Manager, shall review drawings and drawing revisions of workplace layout for compliance with regulatory requirements through use of the NETL Safety Analysis and Review System (SARS) processes.
- c. The monthly NETL ES&H Management Walkthroughs shall be conducted to assess compliance with regulatory and DOE and NETL directives' general workplace safety requirements.
- d. Random workplace environment safety inspections may be performed by the Site Safety Committee.
- e. Line Managers shall ensure, through continuous inspection of areas under their supervision, that the requirements of this Operating Plan and its attachments are being followed.
- f. NETL employees shall immediately report any unsafe conditions to their Line Manager for corrective action. If this is not possible, employees shall use other feedback mechanisms, including the NETL and ES&H grapevines, for reporting.
- g. Line Managers shall provide feedback to their employees regarding actions taken to correct unsafe conditions, including lessons learned, to ensure continuous improvement in safety practices in the workplace environments under their supervision.

7. RESPONSIBILITIES.

- a. The NETL Director shall have ultimate responsibility for general workplace safety programs at NETL and shall provide continuing support for safety in office-type environments.
- b. Line Managers shall:
 - (1) Be responsible for implementing the general workplace safety program in their respective organizations, including following the safety requirements set forth in this Operating Plan and its attachments.

- (2) Assure that adequate financial and personnel resources are available to eliminate and control significant hazards.
 - (3) Ensure that tools, equipment and furniture are maintained in proper condition.
 - (4) Conduct regular inspections of the workplace environments under his/her responsibility.
 - (5) Ensure that corrective actions are performed to resolve general workplace safety deficiencies identified during these inspections.
 - (6) Ensure that NETL employees are properly trained and qualified to safely perform their work in their assigned work environments.
 - (7) Provide NETL employees with appropriate personal protective equipment.
- c. The ES&HD Staff shall conduct regular safety audits, assessments and inspections of work environments at NETL, report all safety issues/hazards to the appropriate Line Manager, and conduct follow-up visits to ensure the hazards have been corrected.
- d. NETL Employees shall:
- (1) Comply with the safety requirements set forth in this Operating Plan and its attachments.
 - (2) Practice safe personal work habits.
 - (3) Maintain equipment and furniture in good working condition. Report malfunctioning tools, equipment or damaged furniture promptly to the Line Manager.
- e. NETL Site Support Contractors shall implement, within their own workforce and workplace, the requirements set forth in this document.

8. TRAINING REQUIREMENTS.

- a. NETL employees shall receive safety training on general workplace hazards.

- b. Line Managers shall ensure that all NETL employees under their supervision have received sufficient training on general workplace hazards, including training on any special or unusual hazards related to their work environments.

9. DOCUMENT CONTROL.

- a. This Operating Plan and its attachments shall be reviewed at least annually and updated as needed by the assigned ES&HD Program Manager.
- b. Documentation associated with this Operating Plan and its attachments shall be maintained in the ES&H Records Center.
- c. The most recent and official controlled hard copy version of this Operating Plan shall reside with NETL's Directives Coordinator. An electronic version of this controlled Operating Plan shall be placed on the NETL Intranet for employee use. Printed hard copies of this Operating Plan (e.g., those printed from the Intranet) shall be considered non-controlled documents.

10. ATTACHMENTS.

- a. Attachment A -- Ergonomics Program.
- b. Attachment B -- Housekeeping.
- c. Attachment C -- Lighting Program.
- d. Attachment D -- Means of Egress and Walkways.
- e. Attachment E -- Safe Use of Personal Appliances.
- f. Attachment F -- Smoking in the Workplace.

Approved: _____

OBL Associate Director

Concur: _____

OST Associate Director

NETL Directives Coordinator

ERGONOMICS PROGRAM

1. PURPOSE: To establish roles, responsibilities, requirements, and processes of NETL's Ergonomics Program in order to reduce the number and severity of musculoskeletal disorders (MSDs) caused by exposure to risk factors in the workplace.
2. CANCELLATION: None.
3. REFERENCES:
 - a. OSHA 29 CFR 1910.900, Ergonomics Program Standard (interim status).
4. DEFINITIONS:
 - a. Administrative Controls -- Procedural or administrative measures taken to reduce risk.
 - b. Engineering Controls -- Methods of controlling risk by eliminating the hazard through design or physical barrier.
 - c. Ergonomic Evaluators -- ES&H staff responsible for conducting ergonomic evaluations at the workplace that include assessing ergonomic stressors and recommending corrective action.
 - d. MSDs -- Musculoskeletal disorders. Injuries and disorders of the muscles, nerves, tendons, ligaments, joints, cartilage, and spinal discs.
5. QUALITY CONTROL:
 - a. This attachment shall be reviewed at least annually and updated as required by the Ergonomics Program Manager. Updating shall be in accordance with NETL Procedure 450.4-1, NETL ES&H Standards Identification and Maintenance Process.
 - b. The Ergonomics Program Manager shall be responsible for evaluating program effectiveness.
6. RESPONSIBILITIES:
 - a. Line Managers shall:

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- (1) Ensure that management of MSDs is available promptly and at no cost to employee.
 - (2) Ensure that work restrictions and work restriction protections are observed for employees who require them.
 - (3) Encourage employees to report MSDs and other ergonomic-related disorders and to seek help.
 - (4) Include ergonomic-related issues in walk-through evaluations.
 - (5) Request ergonomic consultations when designing new office space or redesigning existing space.
- b. The Division Director, Environmental, Safety, and Health shall:
- (1) Ensure ergonomics is included in budget planning exercises.
 - (2) Appoint an Ergonomics Program Manager.
 - (3) Ensure that the site support contractor allocates resources for ergonomic evaluators.
 - (4) Allocate time and resources for the Ergonomics Program Manager and ergonomic evaluators to obtain specialized training.
- c. The Ergonomics Program Manager shall:
- (1) Be responsible for reviewing laws, regulations, and consensus standards related to the field of ergonomics and ensuring compliance within the NETL program.
 - (2) Develop best management practices related to the field of ergonomics.
 - (3) Review and revise this attachment as appropriate.
 - (4) Be the subject matter expert responsible for the technical development of site-wide ergonomics training.
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- (5) Be responsible for evaluating program effectiveness.
- (6) Ensure the implementation and maintenance of a system through which MSD signs and symptoms can be reported and acted upon promptly.
- (7) Be responsible for ensuring that an ergonomic-specific job hazard analysis is conducted for activities that may expose workers to ergonomic hazards.
- (8) Ensure competency of ergonomic evaluators.
- (9) Approve and process purchase requests for ergonomic equipment and furniture.
- (10) Review published safety and health ergonomic studies and determine applicability to NETL work environments.

d. Ergonomic Evaluators shall:

- (1) Maintain a database of employee ergonomic evaluations and corrective actions taken.
- (2) Perform ergonomic evaluations and make corrective action recommendations in a timely fashion.
- (3) Initiate purchase requests for the specialty equipment and furniture purchased by the ES&H Division.
- (4) Maintain appropriate personal knowledge of the subject of ergonomics.
- (5) Notify the employee's Line Manager that an ergonomic evaluation has been requested in his/her area, and upon completion, any corrective action(s) recommended.
- (6) Record observations of the workstation, employee complaints and concerns, recommended corrective action, and corrective actions taken.

e. The Site Support Contractor for Site Operations shall:

- (1) Provide ergonomic evaluators.

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- (2) Develop a safe lifting or back injury prevention program.
- f. The Occupational Health Unit (OHU) shall:
- (1) Provide ergonomic evaluations or consultations for employees with suspected occupationally induced MSDs, upon request of the employee, Line Manager, or ergonomic evaluators.
 - (2) Report OSHA reportable injuries to the Site Safety Officer for entry into the Computerized Accident/ Incident Reporting System (CAIRS) and the OSHA 200 log.
 - (3) Maintain medical records.
 - (4) Specify work restrictions where needed and report these to the employee and employee's Line Manager.
- g. The Site Safety and Health Officer shall:
- (1) Include MSDs, as applicable, in the CAIRS report and OSHA 200 log.
 - (2) Provide independent review of the Ergonomics Program.
- h. Employees shall:
- (1) Participate in training.
 - (2) Participate in the ergonomic job hazard analysis, as required.
 - (3) Report possible MSD injuries and ergonomic concerns to his/her manager or supervisor, OHU, or the Ergonomics Program Manager.
 - (4) Participate in Ergonomic Program assessments.
- i. The Site Support Contractor (SSC) Training Staff shall:
- (1) Maintain and distribute training records per contract requirements.
 - (2) Conduct training as determined by the Ergonomics Program Manager.
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7. TRAINING REQUIREMENTS:

- a. NETL shall institute a training program for employees who have occupational exposure to MSD hazards.
- b. The training program for employees, Ergonomics Program Manager, and ergonomic evaluators shall be consistent with regulatory requirements, consensus standards, and/or best management practice.

8. DOCUMENT CONTROL:

- a. This attachment shall be reviewed at least annually and updated as needed by the Ergonomics Program Manager.
- b. All records shall be maintained per DOE, NETL, and OSHA directives governing the disposition, maintenance, and schedule of records.
- c. The SSC shall maintain the ergonomic evaluation database to track employee requests, evaluations, and evaluation results.
- d. The Ergonomics Program Manager shall be responsible for maintaining documents related to ergonomic job hazard analysis and program evaluations.
- e. The most recent and official controlled hard copy version of this attachment shall reside with NETL's Directives Coordinator. An electronic version of this controlled attachment shall be placed on the NETL Intranet for employee use. Printed hard copies of this attachment (e.g., those printed from the Intranet) shall be considered non-controlled documents.

9. PROCEDURE:

- a. Employee requests.
 - (1) Employees may request an ergonomic evaluation from the Ergonomics Program Manager or from an ergonomic evaluator.
 - (2) Legitimate reasons for conducting an ergonomic evaluation include, but are not limited to:

- (a) The development of pain or discomfort related to the use of the workstation, equipment, or tools.
 - (b) Addressing a concern that has not yet resulted in pain or discomfort.
 - (c) Addressing accommodation issues.
 - (d) As a preventive measure to stop the development of MSDs in the conduct of activities that have established ergonomic hazards.
- (3) The Ergonomics Program shall not be used to replace furniture or equipment in situations where there is no safety or health concern, such as funding an office redesign that was not initiated by an ergonomics concern, or for replacing chairs with worn out or dirty upholstery. NETL Space Managers shall provide consultation, services, and furniture purchases related to routine office requirements.
 - (4) The ergonomic evaluator assigned to the evaluation will schedule the evaluation with the employee, and coordinate the participation of an OHU doctor or nurse for the evaluation if one is needed.
 - (5) Evaluations shall be conducted with the employee present. The employee may request that his/her Line Manager be present.
 - (6) The ES&H Division shall usually purchase equipment, tools, or furniture required for corrective action. The ES&H Division shall not be responsible for funding office or area redesigns or replacement of furniture not specifically needed to address safety and health issues.
 - (7) The NETL Ergonomics Program applies to all NETL operations and employees.

b. Line Manager requests.

- (1) Line Managers may request an ergonomic evaluation of an area or of specific work stations if he/she notes ergonomic concerns in an area.

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- (2) Line Managers may request an ergonomic evaluation on behalf of an employee with MSD signs, symptoms, or concerns.
 - (3) Line Managers and NETL Space Managers may request ergonomic consultations for workstation design during space planning processes.

c. Back program.

- (1) The NETL Ergonomics Program shall also provide safe lifting instruction and back health education.
- (2) Line Managers and employees may request services of the back program according to the same guidelines as the workstation evaluation program.

HOUSEKEEPING

1. PURPOSE: To reduce workplace accidents and injuries by identifying and correcting general egress problems; housekeeping issues; and slipping, tripping, electrical, and fire hazards.
2. CANCELLATION: None.
3. REFERENCES:
 - a. Statutory ES&H Standards:
 - (1) 29 CFR 1910.22, General Requirements (Walking and Working Surfaces).
 - (2) 29 CFR 1910.176, Handling Materials - General.
 - (3) 29 CFR 1910.1450, Occupational Exposure to Hazardous Chemicals in Laboratories.
 - (4) 29 CFR 1910.303, Electrical Safety.
 - (5) 29 CFR 1926.25, Housekeeping.
 - (6) 29 CFR 1926.403, Electrical Safety.
 - b. Reference ES&H Standards:
 - (1) NFPA 70, National Electrical Code, current edition.
4. DEFINITIONS: None.
5. QUALITY CONTROL:
 - a. This attachment shall be reviewed at least annually and updated as required by the designated ES&H Program Manager. Updating shall be in accordance with NETL Procedure 450.4-1, NETL ES&H Standards Identification and Maintenance Process.
 - b. Housekeeping practices shall be monitored using NETL's ES&H Management Walkthrough Inspections Program.

6. RESPONSIBILITIES:

a. Line Managers shall:

- (1) Ensure employees are advised of and follow the requirements of this attachment.
- (2) Periodically inspect the workplace to ensure safe housekeeping practices are followed.

b. DOE or SSC ES&H Staff shall:

- (1) Conduct routine inspections of work areas for compliance with this attachment's requirements.
- (2) Ensure that housekeeping deficiencies are corrected upon discovery.
- (3) Enter findings into the Assessment Information Input System (AIIS) for tracking.

c. Employees shall:

- (1) Keep their workplaces clean and store tools and other items in appropriate places.
- (2) Report housekeeping problems or deficiencies to their Line Manager or Facility/Area Custodian for resolution.
- (3) Be familiar with and comply with the requirements of this attachment.

7. TRAINING REQUIREMENTS: None.

8. DOCUMENT CONTROL:

- a. This attachment shall be reviewed at least annually and updated as needed by the designated ES&HD Program Manager to accommodate changing conditions at NETL and to ensure compliance with all applicable requirements.
- b. The most recent and official controlled hard copy version of this attachment shall reside with NETL's Directives Coordinator. An electronic version of this controlled attachment shall be placed on the NETL Intranet for employee use. Printed hard copies of this attachment (e.g., those printed

from the Intranet) shall be considered non-controlled documents.

9. PROCEDURE:

a. General requirements. Each employee shall:

- (1) Maintain his/her work area in a clean, orderly, and sanitary condition.
- (2) Notify appropriate personnel for the cleanup of chemical spills as soon as possible.
- (3) Maintain at his/her workstation an adequate number of trash receptacles to hold the day's debris/refuse.
- (4) Store work tools and materials properly.
- (5) Keep stairways, hallways, passageways/aisles, and access to emergency equipment and/or exits dry and not obstructed in any fashion, including material storage, equipment, telephone, or other wiring.
- (6) Not store combustible material such as paper, wooden boxes, pallets, etc., under stairwells or in hallways. Hallways shall be kept free of boxes and materials so that exits or normal paths of travel will not be blocked.
- (7) Store materials only in appropriate cabinets or designated storage areas.
- (8) Not use mechanical and electrical equipment rooms, hallways, or fan lofts as general storage areas. Storage of frequently used spare parts and tools in appropriate cabinets in these areas is permitted.
- (9) Arrange stored materials to prevent tipping, falling, collapsing, rolling, or spreading.
- (10) Remove from work areas and put into storage any item not required for extended periods.
- (11) Periodically sweep up shavings from around equipment such as drill presses, lathes, or planers by using a broom and a dustpan.

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- (12) Not block the walking surfaces of elevated working platforms, such as scaffolds, with tools or materials that are not being used.
 - (13) Straighten or remove rugs and mats that do not lie flat on the floor.
 - (14) Return tools to their storage places after using them.
 - (15) Use caution signs or cones to barricade slippery areas such as freshly mopped floors.
 - (16) Not store anything in a manner that blocks access to electrical panels.

b. Office furniture and equipment.

- (1) Office furniture, equipment, and electrical appliances should be arranged to obtain maximum safety and use of installed facilities, such as overhead lighting, wall outlets, telephones, and other services.
- (2) The minimum width of exit passage shall in no case be less than 28 inches. (Note: Other requirements may apply that may require this minimum width to be increased under specific conditions.)
- (3) Office arrangement shall allow easy egress under emergency conditions.
- (4) Wastebaskets, briefcases, or other objects should be placed where they are not a tripping hazard.
- (5) Tripping hazards from electrical cords, telephone outlets, or other protrusions on the floor shall be avoided by arrangement of furniture or other means.
- (6) Floors shall be free of loose tiles, projections, and loose objects that create a tripping hazard. If these conditions are present, employees should report these conditions to the Line Manager, the Facility/Area Custodian, or the Site Operations Division for resolution.

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- (7) Carpeting shall be in good condition and not badly worn or torn. If the latter conditions are present, employees should report these conditions to the Line Manager, Facility/Area Custodian, or the Site Operations Division for resolution.
- c. Laboratory housekeeping (also see NETL Operating Plan 440.1-2 , NETL Chemical Hygiene Program, for additional and more specific details).
- (1) Each laboratory employee shall be responsible for maintaining the cleanliness of his/her area.
 - (2) The work area must be kept as clean as the work allows.
 - (3) The laboratory and benches shall be kept tidy and free of chemical storage. Apparatus no longer required shall be stored. Waste materials shall be collected and disposed as soon as possible.
 - (4) Access to emergency equipment shall not be blocked.
 - (5) Food and drink must not be taken into laboratories. Eating, drinking, and application of cosmetics is prohibited in laboratories.
 - (6) Containers shall be clearly labeled.
 - (7) Reagents and equipment items shall be returned to their proper place after use. This also applies to samples in progress. Contaminated or dirty glassware should be placed in specific cleaning areas and not allowed to accumulate in work areas.
 - (8) Chemicals shall never be stored on the floor, except in closed-door cabinets suitable for the material to be stored. Large bottles (2.5 liters or larger) should not be stored above the bench top.
 - (9) Reagents, solutions, glassware, or other apparatus shall not be stored in hoods. Besides reducing the available work space, they may interfere with the proper air flow pattern and reduce the effectiveness of the hood as a safety device.
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- (10) Counter tops shall be kept neat and clean. Bench tops and fume hoods shall not be used for chemical storage.
- (11) Stored items, equipment, and glass tubing shall not project beyond the front edge of the shelf or counter.
- (12) Stored items or equipment shall not block access to the fire extinguisher(s), safety equipment, electrical panels, or other emergency items.

d. Construction housekeeping.

- (1) During the course of construction, alteration, or repairs, forms and scrap lumber with protruding nails, and all other debris shall be removed from work areas, passageways, and stairs, in and around buildings or other structures.
- (2) Combustible scrap and debris shall be removed at regular intervals during the course of construction. Safe means shall be provided to facilitate such removal.
- (3) Containers shall be provided for collecting and separating waste, trash, oily and used rags, and other refuse. Containers used for garbage shall be equipped with covers. Garbage and other waste shall be disposed of at frequent and regular intervals.
- (4) Employees shall avoid the storage of anything that will block free access to electrical circuit panels.
- (5) Useable building materials shall be stacked or piled neatly, in a manner that does not obstruct emergency egress.
- (6) Oily or combustible rags shall be stored in an approved metal container.
- (7) Collection and disposal of hazardous material and hazardous waste shall be done in accordance with NETL Procedure 435.1-1, NETL Waste Handling, Storage, and Disposal.

LIGHTING PROGRAM

1. PURPOSE: To assure that area, emergency, and exit lighting in laboratories, offices, and other work areas at the NETL complies with the criteria prescribed in applicable Federal, state, and local regulations and best management practices.

This attachment describes the Illumination Management Program, which includes illumination inspections and illumination improvement activities, and its functional elements/goals: (1) security -- to provide adequate lighting to aid security activities on site; (2) safety -- to provide adequate lighting to ensure a safe working environment; (3) industrial hygiene -- to provide adequate lighting to ensure a healthful working environment.

2. CANCELLATION:

- a. PETC Document No. EH&S 3.4, Illumination Management Program, of 9/19/90.
- b. PETC Document No. EH&S 3.4.1, Illumination Inspections Plan, of 2/28/91.
- c. PETC Document No. EH&S 3.4.2, Illumination Improvement Plan, of 2/28/91.

3. REFERENCES:

- a. DOE Order 6430.1A, General Design Criteria, of 4/6/89.
- b. Statutory ES&H Standards:
 - (1) 29 CFR 1910, Subpart N, Materials Handling and Storage.
 - (2) 29 CFR 1910.37, Means of Egress, General.
 - (3) 29 CFR 1910.68, Manlifts.
 - (4) 29 CFR 1910.107, Spray Finishing Using Flammable and Combustible Materials.
 - (5) 29 CFR 1910.110, Storage and Handling of Liquefied Petroleum Gases.

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- (6) 29 CFR 1910.120, Hazardous Waste Operations and Emergency Response.
 - (7) 29 CFR 1910.178, Powered Industrial Trucks.
 - (8) 29 CFR 1910.179, Overhead and Gantry Cranes.
 - (9) 29 CFR 1910.219, Mechanical Power – Transmission Apparatus.
 - (10) 29 CFR 1910.303, General Requirements [Electrical].
 - (11) 29 CFR 1910.305, Wiring Methods, Components, and Equipment for General Use.
 - (12) 29 CFR 1910.333, Selection and Use of Work Practices.
 - (13) 29 CFR 1926.26, Illumination.
 - (14) Allegheny County Health Department, Article III, Food Protection, Section 322, Lighting.

c. Reference ES&H Standards:

- (1) NFPA 101, Safety to Life from Fire in Buildings and Structures.
- (2) ANSI A11.1, Industrial Lighting, Rev. 1973-RP-7, Table I, Footcandle Levels.
- (3) ANSI/IES RP1, Practice for Office Lighting.
- (4) ANSI/IES RP7, Practice for Industrial Lighting.

d. References:

- (1) Illuminating Engineering Society Lighting Handbook, Sixth Edition, Volumes I and II, current edition.
- (2) IES Lighting Handbook. Reference Volume, 1984, current edition.
- (3) IES Lighting Handbook. Application Volume, 1987, current edition.

4. DEFINITIONS:

- a. Contrast Rendition -- Degree of difference between the lightest and darkest areas of a surface or picture.
- b. Efficiency -- The ratio of useful energy delivered to the energy supplied.
- c. Foot-Candle -- A unit of luminance on a surface 1 foot from a uniform point source of light of one candle and equal to one lumen per square foot.
- d. Intensity -- Amount of light per unit area.
- e. IQM -- Illumination Quality Manager.
- f. Lumen -- Unit of luminous flux equal to the light emitted by a uniform point source of one candle intensity.
- g. Luminaire -- A complete lighting system, including a lamp or lamps and a fixture.
- h. Luminance -- Luminous flux per unit area on an intercepting surface.

5. QUALITY CONTROL:

- a. This attachment shall be reviewed at least annually and updated as required by the Illumination Quality Manager. Updating shall be in accordance with NETL Procedure 450.4-1, NETL ES&H Standards Identification and Maintenance Process.
- b. Illumination meters shall be calibrated and repaired by the manufacturer's representative in accordance with the manufacturer's schedule.

6. RESPONSIBILITIES:

- a. The ES&HD Director shall appoint a NETL Illumination Quality Manager to manage the Illumination Management Program.
- b. NETL Illumination Quality Manager (IQM) shall:
 - (1) Develop an Illumination Inspection Plan.

- (2) Evaluate, on a regular basis, the adequacy of lighting in NETL workplaces based on the Illumination Inspection Plan.
 - (3) Maintain a current Illumination Improvement Plan that addresses actions to be taken in correcting lighting in areas that have been identified as not meeting prescribed criteria.
 - (4) Maintain a complete, centralized file of records pertaining to surveys, illumination measurement activities, and illumination improvement actions.
 - (5) Coordinate significant modifications to existing illumination systems or installation of new illumination systems.
- c. NETL Site Support Contractors shall implement, within their own workforce and workplace, the requirements set forth in this attachment.
 - d. Responsible Persons (such as facility or area custodians) shall be responsible for executing corrective actions related to illumination deficiencies in their areas.

7. TRAINING REQUIREMENTS: None.

8. DOCUMENT CONTROL:

- a. A complete, centralized file of records pertaining to surveys, illumination measurement activities, and illumination improvement actions shall be maintained by the NETL IQM. The records maintained shall reflect the requirements of all applicable Federal, state, and local regulations, and DOE Orders.
- b. This attachment shall be reviewed at least annually and updated as needed by the Illumination Program Manager to accommodate changing conditions at NETL and to ensure compliance with all applicable requirements.
- c. The most recent and official controlled hard copy version of this attachment shall reside with NETL's Directives Coordinator. An electronic version of this controlled attachment shall be placed on the NETL Intranet for employee use. Printed hard copies of this attachment (e.g., those printed

from the Intranet) shall be considered non-controlled documents.

9. PROCEDURE:

a. Illumination inspections.

- (1) Based on a comprehensive, site-wide Illumination Inspection Plan, the adequacy of lighting in NETL workplaces shall be evaluated through inspections.
- (2) These illumination inspections of all workplaces at NETL shall be conducted at least tri-annually or may be initiated more frequently by the following:
 - (a) DOE and SSC ES&H staff requests.
 - (b) Requests from Line Management, OHU, and employees.
 - (c) Requests from in-house energy management specialists.
 - (d) Evaluation of new or changed luminaire systems.
 - (e) Evaluation of periodic planned cleaning practices.
 - (f) Changes to regulations, DOE directives, or illumination guidelines/recommendations.
 - (g) Data requests from lighting designers.
 - (h) Evaluation of improvements.
- (3) Following completion of the illumination survey, the area may be resurveyed to document the effect of any corrective action.

b. Security requirements.

- (1) Lighting requirements for security purposes encompass the ability to observe and to reasonably identify movement, objects, people, and potentially dangerous situations or obstructions.

- (2) Adequate lighting shall be provided for areas of concern such as security checkpoints, security posts, parking lots, outside of doors, exterior lighting of buildings, and lighting of perimeter boundaries.
- (3) Because of the varied needs of security and the varied nature of luminaires, the luminaire system shall be designed to meet multiple and specific observer needs (e.g., human eye, television camera, and video recording tape).
- (4) The luminaire system shall be designed with protective covers over lamps (including lamps mounted on high poles) and buried power lines protected with boxes. The efficiency/brightness shall be based upon established minimum specifications for curve of light outputs.
- (5) New outdoor lighting installations and renovation or replacement of existing outdoor security lighting systems shall be designed to direct light downward rather than skyward to reduce urban light pollution.

c. Safety requirements.

- (1) Safe illuminating practices and actions specified in applicable statutory and reference ES&H standards (e.g., OSHA) identified in this attachment shall be complied with. A partial list of the more cross-cutting requirements is presented below.
- (2) Means of general egress.
 - (a) No decorations, furnishings, or equipment which impair visibility of an exit sign shall be permitted, nor shall there be any brightly illuminated sign (for other than exit purposes), display, or object in or near the line of vision to the required exit sign of such a character as to detract attention from the exit sign that it may not be noticed.
 - (b) Every exit sign shall be suitably illuminated by a reliable light source giving a value of not less than 5-foot candles on the illuminated surface. Artificial lights giving illumination

to exit signs (other than the internally illuminated types) shall have screens, discs, or lenses of not less than 25 square inches area made of translucent material to show red or other specified designating color on the side of the approach.

- (c) An internally illuminated exit sign shall be provided in all buildings where reduction of normal illumination is permitted.
 - (d) The use of radioactive material in exit signs is prohibited.
- (3) Powered industrial trucks. Where general lighting is less than 2 lumens per square foot, auxiliary directional lighting shall be provided on the truck.
- (4) Other general requirements.
- (a) Illumination shall be provided for all working spaces about service equipment, switchboards, panelboards, and motor control centers installed indoors.
 - (b) Adequate illumination shall be provided for all working spaces about electric equipment. The lighting outlets shall be so arranged that persons changing lamps or making repairs on the lighting system will not be endangered by live parts or other equipment. The points of control shall be so located that persons are not likely to come in contact with any live part or moving part of the equipment while turning on the lights.
- (5) The following areas of a food facility shall be well lighted by permanently fixed artificial light sources:
- (a) At least 20-foot candles of light from a permanently fixed artificial source shall be provided to work levels of all food preparation surfaces, equipment or utensil washing areas, equipment and utensil storage areas, and restrooms.

- (b) At least 20-foot candles, to be measured at a distance of 30 inches from the floor, shall be provided in all other areas of a food facility, including walk-in refrigerating units, dry storage, dressing rooms, restrooms, and garbage/refuse storage areas.
- (c) Shielding to protect against broken glass falling onto food shall be provided for all artificial lighting fixtures located over, or within food storage, preparation, service and display areas, and facilities where utensils and equipment are cleaned and stored, except for areas in which commercially packaged food is stored where the integrity of the package will not be affected by broken glass.
- (d) Infrared or other type heat lamps shall be protected against breakage by a shield surrounding and extending beyond the bulb, leaving only the face of the bulb exposed.

d. Industrial hygiene requirements.

- (1) Federal regulatory standards shall be used, as a minimum, for establishing illumination, construction, and installation requirements.
- (2) If more stringent standards exist (e.g., local codes, national codes, professional standards, and manufacturers' consensus standards), these shall be adopted as applicable. Note: Local codes may be obtained from regional electrical inspection departments.
- (3) The quality of lighting required to perform tasks at specified work stations shall be evaluated based on factors such as the luminance differences needed, luminance ratios within the field of view, transient adaptation disability glare, veiling reflections, contrast rendition, and reflected glare and shadows.
- (4) Where workers wear eye protective devices with occupationally required tinted lenses that materially reduce the light reaching the eye, the illuminance for individual tasks should be increased accordingly.

e. Illumination improvement activities.

- (1) Corrective actions for areas not meeting prescribed criteria for illumination and do not present an immediate safety or health concern, shall be scheduled in accordance with an Illumination Improvement Plan or through the Work Order System.
- (2) Immediate corrective actions shall be taken in areas where ongoing operations would pose potential safety or health problems. Routine operations in such areas shall not be resumed without NETL IQM approval.
- (3) When office-type illumination problems or deficiencies are reported or detected during inspection, improvements in illumination shall be accomplished in the following manner by attempting to discern and reduce discomfort glare, reflected glare, disability glare, and veiling reflections by:
 - (a) Decreasing the luminance of lighting equipment or other sources of objectionable glare, such as windows and overhead skylights, relative to the overall luminance.
 - (b) Diminishing the area of uncomfortable luminance (with level of constant luminance).
 - (c) Increasing the angle between the source and line of sight.
 - (d) Increasing the general luminance in the room.
- (4) Periodic planned relamping. A planned relamping program shall be implemented when feasible to arrest lamp lumen depreciation and prevent many burnouts, thereby improving and maintaining illuminance levels.
- (5) Periodic planned cleaning. A periodic planned cleaning program of luminaires shall be implemented at least annually in order to deliver more light per dollar, to provide better energy management, and to reduce capital investment.

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- (6) Modifications to existing illumination systems and installation of new illumination systems. Significant modifications to existing illumination systems or installation of new illumination systems shall be coordinated with the NETL IQM.

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hard copies of this electronic version are considered noncontrolled documents.

MEANS OF EGRESS AND WALKWAYS

1. PURPOSE: To provide a safe means of egress from buildings and work areas in the event of fire and other emergencies.
2. CANCELLATION: None.
3. REFERENCES:
 - a. NETL Procedure 420.2, Life Safety Design Criteria, of 2/20/98.
 - b. Statutory ES&H Standards:
 - (1) 29 CFR 1910, Subpart E, Means of Egress.
 - (2) 29 CFR 1910.22, General Requirements (Walking and Working Surfaces).
 - (3) 29 CFR 1926.25, Housekeeping.
 - (4) 29 CFR 1926.26, Illumination.
 - c. Reference ES&H Standards:
 - (1) NFPA 101, Life Safety Code, current edition.
4. DEFINITIONS:
 - a. Means of Egress -- A continuous and unobstructed way of exit travel from any point in a building or structure to a public way.
5. QUALITY CONTROL:
 - a. This Program and attachment shall be reviewed at least annually and updated as required by the Life Safety Code Program Manager. Updating shall be in accordance with NETL Procedure 450.4-1, NETL ES&H Standards Identification and Maintenance Process.
 - b. Building access and egress shall be evaluated as part of annual (or more frequent) workplace inspections conducted by the NETL Life Safety Code Program Manager or designee.

6. RESPONSIBILITIES:

a. NETL Life Safety Code Program Manager (or designee) shall:

- (1) Conduct annual (or more frequent) inspections of work areas for compliance with the requirements of this attachment.
- (2) Review plans for new construction and/or modification of any part of an exit path (including exit doors) to ensure that the plans comply with all applicable life safety requirements.

b. Line Managers shall:

- (1) Ensure workers are advised of and follow the requirements of this attachment.
- (2) Periodically inspect the workplace to ensure means of egress are identified and are not locked, blocked, or otherwise obstructed.
- (3) Ensure that access and egress deficiencies are corrected immediately upon discovery.

c. NETL Employees shall:

- (1) Report access and egress problems or deficiencies immediately to their Line Manager or the Life Safety Code Program Manager.
- (2) Be familiar with and comply with the requirements of this attachment.

7. TRAINING REQUIREMENTS: None.

8. DOCUMENT CONTROL:

- a. This attachment shall be reviewed at least annually and updated as needed by the Life Safety Code Program Manager to accommodate changing conditions at NETL and to ensure compliance with all applicable requirements.
- b. The most recent and official controlled hard copy version of this attachment shall reside with NETL's Directives Coordinator. An electronic version of this controlled attachment shall be placed on the NETL Intranet for employee use.

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9. PROCEDURE:

a. General requirements.

- (1) Stairs, corridors, aisles, doorways, stairways, and exits shall be kept clear of obstructions at all times.
- (2) Materials such as boxes or trash shall not be placed or stored in stairs, corridors, aisles, doorways, stairways, and exits.
- (3) Walking surfaces of elevated working platforms, such as scaffolds, shall not be blocked with tools or materials that are not being used.
- (4) The Facility/Area Custodian shall be notified to request that the items be removed upon discovering stored or discarded items in stairwell landing areas.

b. Aisles and floors.

- (1) Office arrangements must allow easy egress under emergency conditions.
- (2) Wastebaskets, briefcases, or other objects shall be placed in such a manner that they do not create a tripping hazard.
- (3) Floors shall be clear of pencils, bottles, and other loose objects or debris.
- (4) Tripping hazards from electrical cords, phone outlets, or other protrusions on the floor must be prevented by arrangement of furniture or other means.
- (5) Floors must be free of loose or damaged tiles and carpeting that create a tripping hazard.
- (6) Stored items or equipment shall not block access to the fire extinguisher(s), safety equipment, or other emergency items.

c. Exits.

- (1) Fire doors must not be blocked or locked to prevent emergency use when employees are within the buildings. Delayed opening of fire doors may be permitted when an approved alarm system is integrated into the fire door design.
- (2) A readily visible sign shall mark exits. Readily visible signs in all cases shall mark access to exits where the exit or way to reach it is not immediately visible to the occupants.
- (3) No decorations, furnishings, or equipment that impair visibility of an exit sign shall be permitted.
- (4) If an exit door light is out or a ceiling-hung sign has been disturbed so that the directional arrow does not point toward the exit door, it should be reported to the Facility/Area Custodian.
- (5) Whenever the building is occupied, exit paths shall be lighted so that they may be easily recognized and all exit and directional signs shall be clearly visible.
- (6) Artificial lighting sufficient to enable objects to be seen and egress made under emergency conditions shall be provided when natural lighting is inadequate.
- (7) No building or structure under construction shall be occupied in whole or in part until all exit facilities required for the part to be occupied are completed and ready for use.
- (8) No existing building shall be occupied during repairs or alterations unless all existing exits and any existing fire protection, or equivalent exits and fire protection, are provided and maintained.
- (9) Any device or alarm installed to restrict the improper use of an exit shall be so designed and installed that it cannot, even in cases of failure, impede or prevent emergency use of such exit.
- (10) Stairwell doors shall be kept closed at all times.

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- (11) Any door, passage, or stairway which is neither an exit nor a way of exit access, and which is located or arranged as to be likely to be mistaken for an exit, shall be identified by a sign reading "Not an Exit" or similar designation, or shall be identified by a sign indicating its actual character such as "To Basement," "Storeroom," "Linen Closet," or the like.
 - (12) NFPA 101, Life Safety Code (current version), shall be used as the major reference for determining means of egress specifications.

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hard copies of this electronic version are considered noncontrolled documents.

SAFE USE OF PERSONAL APPLIANCES

1. PURPOSE: To define general safety requirements and identify the responsibilities of personnel using personally-owned appliances such as coffee makers, cup warmers, warming plates, fans, humidifiers, portable refrigerators, radios, clocks, and other electrical appliances in the workplace. Also included are LP gas heaters. This attachment is not applicable to portable equipment powered exclusively by batteries. Other restrictions may apply to the use of any type of electrical equipment in a given area, and must be followed, regardless of the power source.

Personally owned portable space heaters are prohibited in all work areas. NETL-provided space heaters may be obtained and used in accordance with the NETL Procedure for Equipment Safety (which includes Portable Space Heaters).

2. CANCELLATION: None.

3. REFERENCES:

- a. NETL Procedure 440.1-21, Procedure for Equipment Safety (Portable Space Heaters attachment), current version.
- b. NETL Procedure 440.1-24, NETL Electrical Safety, current version.
- c. Statutory ES&H Standards:
 - (1) 29 CFR 1910, Subpart S, Electrical.
 - (2) 29 CFR 1910, Subpart H, Hazardous Materials.
 - (3) 29 CFR 1910, Subpart L, Fire Protection.
 - (4) 29 CFR 1926, Subpart F, Fire Protection and Prevention.
 - (5) 29 CFR 1926, Subpart K, Electrical.

4. DEFINITIONS:

- a. ES&H Representative -- An ES&HD or SSC ES&H employee who is responsible for reviewing new and modified SARS packages and performing annual reviews of projects, operations, and facilities having SARS authorizations.

- b. ES&HD -- Environmental Safety and Health Division.
- c. NRTL -- Nationally Recognized Testing Laboratory. The most commonly known laboratory is Underwriters Laboratories (UL). See Attachment E1 for a list of these laboratories.
- d. Personal Appliance -- Any personally owned electric device used in the workplace, including coffee makers, cup warmers, radios, fans, or other items.
- e. SSC -- Site Support Contractor.

5. QUALITY CONTROL:

- a. This Program and attachment shall be reviewed periodically and updated as required by the designated ES&H Program Manager. Updating shall be in accordance with NETL Procedure 450.4-1, NETL ES&H Standards Identification and Maintenance Process.
- b. ES&H representatives shall notify the Line Manager of, or ensure removal from service of, all personal appliances that do not meet the criteria set forth in this attachment or are not being used as required by this attachment and are not exempted by a Special Work Permit.
- c. Monthly NETL ES&H Management walkthroughs shall provide the required oversight to ensure the safety and health requirements related to use of personally owned appliances are being met.
- d. NETL requirements for on-site use of personal appliances shall be governed by the statutory ES&H requirements included in the references of this attachment.

6. RESPONSIBILITIES:

- a. Line Managers shall:
 - (1) Conduct inspections of personal appliances in their work areas, according to the requirements in this attachment.
 - (2) Determine if the intended location for the use of a personal appliance is acceptable.

(3) Allow/approve only those personal appliances meeting the requirements of this attachment in their respective organizational areas.

(4) Ensure that appliances in their respective area not meeting the requirements of this attachment are removed from the NETL site.

b. Employees who operate personal appliances shall:

(1) Comply with this attachment and ES&H Statutory Requirements.

(2) Remove defective appliances from service.

7. TRAINING REQUIREMENTS: None.

8. DOCUMENT CONTROL:

a. This attachment shall be reviewed at least annually and updated as needed by the designated ES&H Program Manager to accommodate changing conditions at NETL and to ensure compliance with all applicable requirements.

b. The most recent and official controlled hard copy version of this attachment shall reside with NETL's Directives Coordinator. An electronic version of this controlled attachment shall be placed on the NETL Intranet for employee use. Printed hard copies of this attachment (e.g., those printed from the Intranet) shall be considered non-controlled documents.

9. PROCEDURE:

a. This attachment provides guidance in the use of personally owned electrical appliances at NETL in order to minimize the potential for electrical fires, since electrical fires are the leading cause of fires in the workplace. Only personal appliances that meet all of the following requirements shall be used:

(1) Good operational condition, with no loose electrical connections.

(2) Powered by 110 volt AC line current.

(3) Listed by an NRTL. (See Attachment E1.)

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- b. Personal appliances shall not be used in:
- (1) Areas where flammable materials are stored or used, or where combustibles are stored, unless approved by an ES&H Representative. This approval shall be sent in writing to the person requesting the use of the appliance and to the Fire Protection Program Manager.
 - (2) Wet or damp locations unless they are designed for such locations.
- c. NETL-provided space heaters shall be used in accordance with NETL Procedure 440.1-21, Equipment Safety (Portable Space Heaters).
- d. While in use, personal appliances should be observed for proper operation, including signs of overheating or any other malfunction. Personal appliances exhibiting signs of overheating or other malfunction shall be removed from service and/or repaired.
- e. Personal appliances shall be turned off and/or unplugged overnight or when otherwise not attended for a significant amount of time.
- f. Personal appliances shall not produce distracting noise, odor, or otherwise adversely affect others in the workplace.
- g. Cords must be situated to prevent tripping and not be susceptible to being crushed, cut, pinched, or otherwise damaged by traffic through the area.
- h. Personal appliances shall not be handled or suspended by their cords.
- i. To avoid damage or overheating of the personal appliance cords, they shall not be covered in any part with carpet, throw rugs, newspapers, office furniture, etc. If the cord of an appliance crosses an aisle or walkway, it shall have a cord protection strip attached to the cord.
- j. Extension cords shall not be used with personal appliances unless such use is approved by the ES&H Representative and:
- (1) The extension cord used with the appliance is protected to the same specifications as the appliance cord.
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- (2) The extension cord is listed by an NRTL (see Attachment E1) or constructed by a qualified electrician utilizing UL-listed components.

- k. Personal appliances that do not meet the criteria set forth in this attachment or are not being used as required by this attachment, and are not exempted by a Special Work Permit, shall be removed from service immediately.

10. ATTACHMENTS:

- a. Appendix E1, Nationally Recognized Testing Laboratories (NRTL).

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APPENDIX E1

Nationally Recognized Testing Laboratories (NRTL)

The following laboratory organizations have been accredited by OSHA to certify certain specified products or categories of products for use in the workplace.

1. Underwriters Laboratories, Inc. (UL)
333 Pfingsten Road
Northbrook, Illinois 60062
(708) 272-8800
2. Factory Mutual Research Corporation (FMRC)
1151 Boston-Providence Turnpike
P.O. Box 9102
Norwood, Massachusetts 02062
(617) 762-4300
3. MET Electrical Testing Company, Inc. (MET)
Laboratory Division
916 West Patapsco Avenue
Baltimore, Maryland 21230
1-800-638-6057; (301) 354-2200
4. Dash, Straus and Goodhue, Inc. (DSG)
593 Massachusetts Avenue
Boxborough, Massachusetts 01719
(508) 263-2662
5. ETL Testing Laboratories, Inc. (ETL)
Cortland Safety Division
Industrial Park
Cortland, New York 13045
1-800-345-3851; (607) 753-6711
6. American Gas Association Laboratories (AGA)
8501 East Pleasant Valley Road
Cleveland, Ohio 44131
(216) 524-4990
7. Communication Certification Laboratory (CCL)
1940 West Alexander Street
Salt Lake City, Utah 84119
(801) 972-6146

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8. SGS United States Testing Company, Inc. (USTC)
California Division
Los Angeles, California
(323) 838-1600
 9. Canadian Standards Association (CSA)
178 Rexdale Blvd.
Toronto, Ontario
M9W 1R3, Canada
(416) 747-4000

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SMOKING IN THE WORKPLACE

1. PURPOSE: To define the NETL provisions and restrictions regarding the smoking of tobacco and tobacco products at NETL. These provisions and restrictions apply to all NETL employees, research associates, and visitors.
2. CANCELLATION:
 - a. Morgantown Directives:
 - (1) METC Order 3792.2, Smoking on METC Property, of 4/30/93.
 - b. Pittsburgh Directives:
 - (1) PETC Document No. EH&S 3.13, of 11/8/90.
3. REFERENCES:
 - a. 29 CFR 1910 Subpart H, Hazardous Materials.
 - b. 41 CFR 101-20.105-3, Smoking Regulations.
 - c. Executive Order 13058, Protecting Federal Employees and the Public from Exposure to Tobacco Smoke in the Federal Workplace.
 - d. Negotiated Agreement between NETL-Morgantown and Local 1995, American Federation of Government Employees, Article 30, of 9/5/00.
 - e. Negotiated Agreement between NETL-Pittsburgh and Local 1916, American Federation of Government Employees, Article 30, of 9/5/00.
4. DEFINITIONS:
 - a. Smoking -- Lighted cigarette, cigar, pipe, or any other lit tobacco product.
5. QUALITY CONTROL:
 - a. This Program and attachment shall be reviewed periodically by the assigned ES&H Program Manager and updated as required. Updates shall require review by Locals 1916

and 1995, American Federation of Government Employees.
Updating shall be in accordance with NETL Procedure 450.4-1,
NETL ES&H Standards Identification and Maintenance Process.

6. RESPONSIBILITIES:

a. The Director, Human Resources Division shall:

- (1) Ensure that NETL implements the requirements in this document consistent with the Federal Service Labor-Management Relations Act (5 U.S.C. 7101 et seq.) and the National Labor Relations Act (29 U.S.C.151 et seq.).
- (2) Consult with employee representatives about the implementation of the requirements described in this document.

b. NETL Line Managers shall:

- (1) Ensure that their employees are informed about NETL's smoking policy.
- (2) Conduct housekeeping inspections.
- (3) Ensure that NETL employees, research associates, and visitors comply with the NETL smoking policy.
- (4) Take appropriate and progressive disciplinary action as required for noncompliance with smoking policy requirements.

c. Employees shall strictly comply with the NETL smoking policy.

d. ES&HD Staff shall:

- (1) Coordinate smoking cessation programs.
- (2) Provide signs indicating smoking versus non-smoking areas, as designated in the negotiated agreements.

e. NETL Site Support Contractors shall:

- (1) Implement, within their workforce and workplace, the requirements set forth in this document.

7. TRAINING REQUIREMENTS: None.

8. DOCUMENT CONTROL:

- a. This document shall be reviewed at least annually and updated as needed by the designated ES&H Program Manager and Locals 1916 and 1995, American Federation of Government Employees, to accommodate changing conditions at NETL and to ensure compliance with all applicable requirements.
- b. The most recent and official controlled hard copy version of this document shall reside with NETL's Directives Coordinator. An electronic version of this controlled attachment shall be placed on the NETL Intranet for employee use. Printed hard copies of this attachment (e.g., those printed from the Intranet) shall be considered non-controlled documents.

9. PROCEDURE:

- a. Employees, contractors, research associates, and visitors shall smoke only in designated smoking areas.
- b. Managers and supervisors shall take disciplinary action against those who violate the smoking policy requirements.
- c. The following guidelines have been considered in developing the smoking requirements at NETL:
 - (1) All personnel shall be guaranteed a safe and healthful workplace.
 - (2) The policy shall support the rights of smokers and nonsmokers.
 - (3) A clear delineation of where smoking is prohibited and where it is permitted shall be specified.
 - (4) Smoking cessation programs shall be offered for personnel who want to participate.
 - (5) In recognition of the increased health hazards of passive smoke on the nonsmoker, smoking shall be held to an absolute minimum in areas where there are nonsmokers.

- (6) In recognition of the needs of smokers, smoking areas shall be designated in areas such that it does not negatively impact worker productivity, and does not impinge on the health of those who do not smoke.

d. Prohibited areas.

- (1) Smoking is not permitted inside any building except designated smoking shelters.
- (2) Smoking is prohibited where combustible and flammable chemicals and gases are utilized or stored.
- (3) Smoking is not permitted within 20 feet of any doorway or ventilation air intake.
- (4) Smoking is prohibited in the courtyard areas at each site. The courtyard areas are roughly defined by Buildings 26, 1, 25, and 3 at the Morgantown site and by Buildings 920, 921, and 922 at the Pittsburgh site.
- (5) Smoking is prohibited in Government vehicles.
- (6) Smoking is not permitted in locations where there is a collection of readily ignitable, combustible materials.

e. Smoking areas. Smoking shall be permitted in:

- (1) Designated smoking shelters.
- (2) Outside buildings beyond the distance requirements stated above.

f. Facilities and equipment.

- (1) The NETL shall provide ashtrays or receptacles in the designated smoking areas.
- (2) Uniform smoking policy signs shall be placed on or near the entrance doors of buildings, in addition to other appropriate locations in buildings subject to these requirements. Safety signs shall be utilized to warn personnel of hazards involving open lights and/or ignition sources in the presence of flammable gases, liquids, or other hazardous materials.

g. Inquiries and conflict resolutions.

- (1) Employees with inquiries or complaints should discuss the issue(s) with supervisory personnel. If a satisfactory solution is not reached, the employee could proceed to file a formal complaint, utilizing the NETL grievance procedure or applicable negotiated grievance procedure.
- (2) Representatives from the ES&HD Offices and the Human Resources Division are available for consultation and assistance.

h. Enforcement.

- (1) General "Smoking Only Allowed in Designated Areas" and specific "Smoking Permitted" area signs shall be posted.
- (2) Employees and visitors are expected to honor the smoking and no-smoking designations.
- (3) Discipline for violations of the smoking policy shall be progressive and shall be consistently applied throughout the organization.